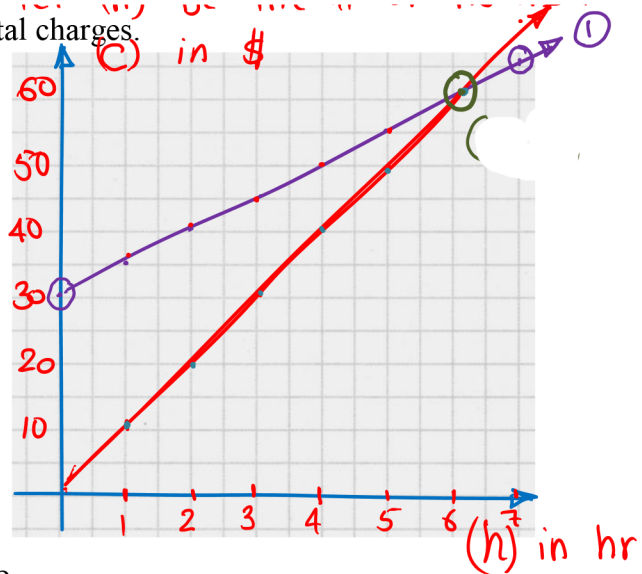


**Chapter 7 System of Equations****Section 7.2: Solving a System of Linear Equations Graphically**

**Example 1:** People can rent ski and snowboard equipment from two stores on Cypress Mountain. The Ski Shack charges a onetime \$30 fee and then an additional \$5 per hour. The Boogie Board charges \$10 per hour for equipment rentals.

a) Create a system of linear equations to model the rental charges.

b) Graph out the two systems.



c) What are the coordinates of the point of intersection?

d) What does the intersection point represent?

If two lines intersect, the coordinates  $(x, y)$  of the point of intersection are the solution of the linear system.

**Example 2:** Solve the following system graphically.

(Use the ideas from Chapter 6's slope y-int form to help you graph)

$$y = -2x + 8$$

$$x + y = 6$$

